

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/075902 A1

(51) International Patent Classification⁷: **F25B 17/08**,
F25D 31/00, F16K 15/02, 15/18

(21) International Application Number:
PCT/EP2005/000968

(22) International Filing Date: 1 February 2005 (01.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04290318.7 6 February 2004 (06.02.2004) EP

(71) Applicant (for all designated States except US): **THER-
MAGEN S.A.** [FR/FR]; 1, avenue de la Terrasse, Bâtiment
5, F-91198 Gif-sur-Yvette (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JEUCH, Pierre**

[FR/FR]; 6, allée des Eglantines, F-91190 Saint-Aubin
(FR). **FRANTZ, Lionel** [FR/FR]; 64, rue Barrault,
F-75013 Paris (FR). **KHAIRALLAH, Fadi** [FR/FR]; 14,
rue Ménard, F-78000 Versailles (FR).

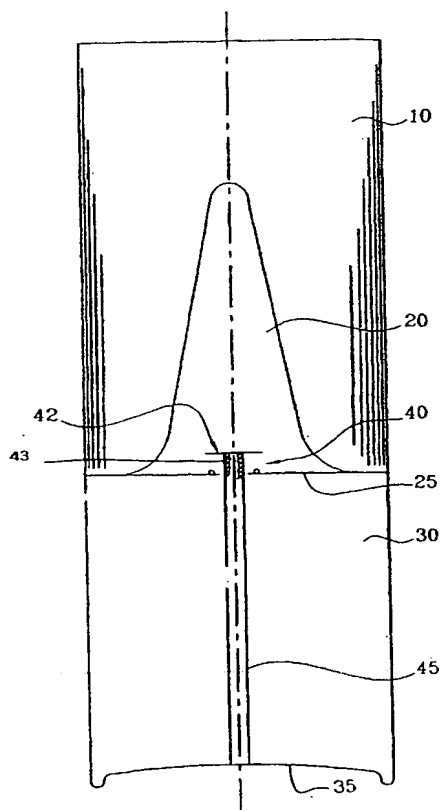
(74) Agent: **CABINET HIRSCH**; Groupement 161, 58, av-
enue Marceau, F-75008 Paris (FR).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: ACTUATING DEVICE FOR SELF COOLING PACKAGING



(57) Abstract: A self-cooling packaging comprises a cavity forming a heat exchanger (20) and containing a refrigerant liquid and the vapour thereof and a cavity forming an adsorption chamber (30) for pumping of said vapour. The packaging also includes connection means (40) provided in a common wall (25) of said cavities (20, 30), said connection means comprising a check valve (42), and actuating means (45) disposed on the side of the adsorption chamber cavity (30) and adapted to open the check valve (42) to an initial position inside the heat exchanger cavity (20). The packaging further comprise spring means (43), the check valve (42) being adapted to progressively reach a fully open position under the action of said spring means (43). The invention makes it possible to realise a progressive opening of the check valve inside the heat exchanger cavity.

WO 2005/075902 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.